

Exploring Aeronautics			
2007 Mathematics			
State Frameworks			
Mississippi Mathematics			
Grade 5			
Activity/Lesson	State	Standards	
Fundamentals of Aeronautics (145-176)	MS	MA.5.4.b	Convert units within a given measurement system to include length, weight/mass, and volume.
Fundamentals of Aeronautics (145-176)	MS	MA.5.4.d	Select and apply appropriate units for measuring length, mass, volume, and temperature in the standard (English and metric) systems.
Fundamentals of Aeronautics (145-176)	MS	MA.5.5.b	Compare data and interpret quantities represented on tables and graphs, including line graphs, stem-and-leaf plots, histograms, and box-and-whisker plots to make predictions, and solve problems based on the information.
Science of Flight	MS	MA.5.4.b	Convert units within a given measurement system to include length, weight/mass, and volume.
Integrating with Aeronautics	MS	MA.5.1.d	Model and distinguish between prime and composite numbers.
Scientific Method(124-144)	MS	MA.5.5.a	Use the mean, median, mode, and range to analyze a data set.
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2007 Mathematics			
State Frameworks			
Mississippi Mathematics			
Grade 6			
Activity/Lesson	State	Standards	
Fundamentals of Aeronautics (145-176)	MS	MA.6.2.e	Describe a rule for a function table using words, symbols, and points on a graph and vice versa.
Fundamentals of Aeronautics (145-176)	MS	MA.6.4.f	Apply techniques and tools to accurately find length, area, and angle measures to appropriate levels of precision.
Wings(177-208)	MS	MA.6.4.f	Apply techniques and tools to accurately find length, area, and angle measures to appropriate levels of precision.
Integrating with Aeronautics	MS	MA.6.1.g	Model addition and subtraction of integers with physical materials and the number line.
Integrating with Aeronautics	MS	MA.6.2.a	Solve simple equations using guess-and-check, diagrams, properties, or inspection, explaining the process used.
Integrating with Aeronautics	MS	MA.6.2.b	Complete a function table based on a given rule.
Integrating with Aeronautics	MS	MA.6.2.c	Formulate algebraic expressions, equations, and inequalities to reflect a given situation.
Integrating with Aeronautics	MS	MA.6.2.d.4	Identity properties of addition and multiplication

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2007 Mathematics			
State Frameworks			
Mississippi Mathematics			
Grade 7			
Activity/Lesson	State	Standards	
Fundamentals of Aeronautics (145-176)	MS	MA.7.2.a	Recognize, describe, and state the rule of generalized numerical and geometric patterns using tables, graphs, words, and symbols.
Fundamentals of Aeronautics (145-176)	MS	MA.7.5.a	Use proportions, estimates, and percentages to construct, interpret, and make predictions about a population based on histograms or circle graph representations of data from a sample.
The Resource Center	MS	MA.7.1.h	Solve contextual problems requiring the comparison, ordering, and application of integers.
Science of Flight	MS	MA.7.5.d	Determine probabilities through experimentation, simulation, or calculation. (Note: Make and test conjectures and predictions by calculating the probability of an event.)
Integrating with Aeronautics	MS	MA.7.2.a	Recognize, describe, and state the rule of generalized numerical and geometric patterns using tables, graphs, words, and symbols.
Integrating with Aeronautics	MS	MA.7.2.b	Solve equations that represent algebraic and real-world problems using multiple methods including the real number properties.
Integrating with Aeronautics	MS	MA.7.2.c	Formulate algebraic expressions, equations, and inequalities to reflect a given situation and vice versa.
Integrating with Aeronautics	MS	MA.7.2.e.4	Identity properties of addition and multiplication
Integrating with Aeronautics	MS	MA.7.3.a	Classify and compare three-dimensional shapes using their properties.
Integrating with Aeronautics	MS	MA.7.3.e	Create an argument using the Pythagorean Theorem principles to show that a triangle is a right triangle.
Integrating with Aeronautics	MS	MA.7.4.a	Convert from one unit to another, perform basic operations, and solve real-world problems using standard (English and metric) measurements within the same system.
Scientific Method(124-144)	MS	MA.7.5.a	Use proportions, estimates, and percentages to construct, interpret, and make predictions about a population based on histograms or circle graph representations of data from a sample.
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2007 Mathematics			
State Frameworks			
Mississippi Mathematics			
Grades 7-8			
Activity/Lesson	State	Standards	

Fundamentals of Aeronautics (145-176)	MS	MA.7-8.PA.4.a	Solve real-world application problems that include length, area, perimeter, and circumference using standard measurements.
Fundamentals of Aeronautics (145-176)	MS	MA.7-8.PA.5.d	Construct and interpret scatter plots to generalize trends from given data sets.
Wings(177-208)	MS	MA.7-8.PA.4.a	Solve real-world application problems that include length, area, perimeter, and circumference using standard measurements.
The Resource Center	MS	MA.7-8.PA.1.a	Define, classify, and order rational and irrational numbers and their subsets.
Science of Flight	MS	MA.7-8.PA.5.c	Make and list conjectures by calculating probability for experimental or simulated contexts.
Integrating with Aeronautics	MS	MA.7-8.PA.2.a	Simplify and evaluate numerical and algebraic expressions.
Integrating with Aeronautics	MS	MA.7-8.PA.2.c	Solve and check equations and inequalities using one variable.
Integrating with Aeronautics	MS	MA.7-8.PA.4.a	Solve real-world application problems that include length, area, perimeter, and circumference using standard measurements.
Integrating with Aeronautics	MS	MA.7-8.PA.4.b	Develop, analyze, and explain methods for solving problems involving proportions, such as scaling and finding equivalent ratios.
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Grades 8-9			
Activity/Lesson	State	Standards	
Fundamentals of Aeronautics (145-176)	MS	MA.8-9.TA.4.b	Explain and apply the appropriate formula to determine length, midpoint, and slope of a segment in a coordinate plane (i.e., distance formula, Pythagorean Theorem).
Fundamentals of Aeronautics (145-176)	MS	MA.8-9.TA.5.a	Construct graphs, make predictions, and draw conclusions from tables, line graphs, and scatter plots.
Wings(177-208)	MS	MA.8-9.TA.4.a	Solve real-world problems involving measurements (i.e., circumference, perimeter, area, volume, distance, temperature, etc.).
Integrating with Aeronautics	MS	MA.8-9.TA.1.b	Simplify and evaluate expressions using order of operations and use real number properties to justify solutions.
Integrating with Aeronautics	MS	MA.8-9.TA.2.b	Explain and illustrate how changes in one variable may result in a change in another variable.
Integrating with Aeronautics	MS	MA.8-9.TA.2.j	Apply ratios and use proportional reasoning to solve real-world algebraic problems.
Integrating with Aeronautics	MS	MA.8-9.TA.3.a	Apply the Pythagorean Theorem to solve problems.

Integrating with Aeronautics	MS	MA.8-9.TA.4.a	Solve real-world problems involving measurements (i.e., circumference, perimeter, area, volume, distance, temperature, etc.).
Scientific Method(124-144)	MS	MA.8-9.TA.5.a	Construct graphs, make predictions, and draw conclusions from tables, line graphs, and scatter plots.